

# SOFTWARE DEVELOPMENT



## ABOUT THIS DEGREE PROGRAM

### TECH CORE A FOUNDATION IN TECHNOLOGY

This program is anchored with Tech Core, curriculum designed to help you build a foundation of interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. You'll learn relevant skills in operating systems, programming, hardware, connectivity and security – giving you a hands-on foundation in engineering technology, information technology and software and information systems.

### A PROGRAM TO FUEL YOUR FUTURE

With this program, you'll not only be armed with the Tech Core experience, but you'll also be exposed to a variety of concepts that can help guide your specialization choice in Big Data and Analytics, Software Design and Programming, and Web and Mobile Application Development.

### IS THIS PROGRAM FOR YOU?

Interested in a career in software development but not sure where to focus? With this program, you'll become familiarized with methods for improving software design and application product development to help guide your degree specialization choice.

## CAREER OPPORTUNITIES

Graduates of DeVry's Software Development degree program may consider, but are not limited to, the following careers:

- Software Application Developer
- Software Systems Developer

## WHAT YOU'LL LEARN

### ESSENTIALS

- Communicate methods and findings
- Collaborate in dynamic work environments
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

### TECH CORE

- Produce, secure, operate and troubleshoot small enterprise networks
- Network, secure and deploy digital devices and sensors into the IoT ecosystem
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using command-line interface (CLI)

### PROGRAM

- Design web distributed systems
- Develop applications
- Analyze and design software systems
- Product life cycle management

## QUICK FACTS

**120**  
CREDIT HOURS  
minimum credit hours  
required for graduation

**2 + 8**  
YEARS MONTHS  
minimum length to graduation<sup>1</sup>



### THE SMART WAY TO BE UNDECIDED

With our undecided model, you'll be exposed to three different specializations and be better armed to choose your path.<sup>2</sup>



### PORTABLE IoT KIT

You can simulate the Internet of Things (IoT) experience wherever you are. With our portable IoT Kit, you'll get hands-on experience in how IoT technologies work in the real world. Your kit will include digital devices, sensors and other tools you will use to build relevant IoT systems.



### CERTIFICATION EXAM REIMBURSEMENT

We reimburse qualified students up to \$300 for the cost of one industry certification exam attempt across a wide range of fields.

<sup>1</sup>Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/degree-programs.html>.

<sup>2</sup>Must declare a specialization by 60 credit hours for bachelor's degree program.

## ESSENTIALS

**50**  
CREDIT HOURS

### COMMUNICATION SKILLS

ENGL112	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing
SPCH275	Public Speaking

### HUMANITIES

ETHC232	Ethical and Legal Issues in the Professions
LAS432	Technology, Society, and Culture

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society
SOCS325	Environmental Sociology

### MATHEMATICS AND NATURAL SCIENCES

MATH114	Algebra for College Students
MATH221	Statistics for Decision-Making
MATH233	Discrete Mathematics
PHYS204	Applied Physics with Lab

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405	Career Development
COLL148	Critical Thinking and Problem-Solving

## TECH CORE

**21**  
CREDIT HOURS

### TECH CORE

CEIS101	Introduction to Technology and Information Systems
CEIS106	Introduction to Operating Systems
CEIS110	Introduction to Programming
CEIS114	Introduction to Digital Devices
NETW190	Fundamentals of Information Technology and Networking I
NETW200	Fundamentals of Information Technology and Networking II
SEC285	Fundamentals of Information Security

## PROGRAM

**38**  
CREDIT HOURS

### INFORMATION SYSTEMS AND PROGRAMMING

CEIS236	Database Systems and Programming Fundamentals
CEIS312	Introduction to Artificial Intelligence and Machine Learning
CIS170C	Programming with Lab
CIS247C	Object-Oriented Programming with Lab

### APPLICATION DEVELOPMENT

CEIS295	Data Structures and Algorithms
CIS321	Structured Analysis and Design
CIS339	Object-Oriented Analysis and Design
CIS355A	Business Application Programming with Lab
WEB375	Web Architecture with Lab

### SENIOR PROJECT

CEIS392	Product, Project, and People Management
CEIS494	Senior Project I
CEIS496	Senior Project II

### TECHNOLOGY CAREER PREPARATION

CEIS299	Careers and Technology
CEIS499	Preparation for the Profession

## SPECIALIZED

**12**  
CREDIT HOURS

Students who have not chosen an area of specialization may begin the program in “Undecided” status; however, they must select a specialization by the time they have earned 60 semester credit hours toward their degree.

Available specializations are:

- Big Data and Analytics
- Software Design and Programming
- Web and Mobile Application Development

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In New York, DeVry University operates as DeVry College of New York. DeVry University is accredited by The Higher Learning Commission (HLC), [www.hlcommission.org](http://www.hlcommission.org). Keller Graduate School of Management is included in this accreditation. DeVry is certified to operate by the State Council of Higher Education for Virginia. Arlington Campus: 2450 Crystal Dr., Arlington, VA 22202. DeVry University is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission, [www.tn.gov/thec](http://www.tn.gov/thec). Nashville Campus: 3343 Perimeter Hill Dr., Nashville, TN 37211. Programs, course requirements and availability vary by location. Some courses may be available online only. All students enrolled in site-based programs will be required to take some coursework online and, for some programs and locations, a substantial portion of the program may be required to be completed online. DeVry's academic catalog, available via [devry.edu/catalogs](http://devry.edu/catalogs), contains the most current and detailed program information, including admission, progression and graduation requirements. Information contained herein is effective as of date of publishing. ©2019 DeVry Educational Development Corp. All rights reserved. Version 1/13/20